

Learning Objectives

- 1) Recognize hybrid strategy of subtotal resection with adjuvant SRS concept in vestibular schwannoma patients.
- 2) Define facial nerve function outcome and tumor control rate with this hybrid strategy

Introduction

Still there is a limited number of reported outcomes with combined STR and adjuvant SRS as a management strategy for patients with large size vestibular Schwannoma. Here we present our experience with this technique.

Methods

Retrospective review of 23 patients with VS Koos grade III and IV planned to have Subtotal resection followed by SRS. We followed up tumor volumes using iplanet software in calculation. Facial nerve function, hearing preservation and trigeminal neuropathy were reported.

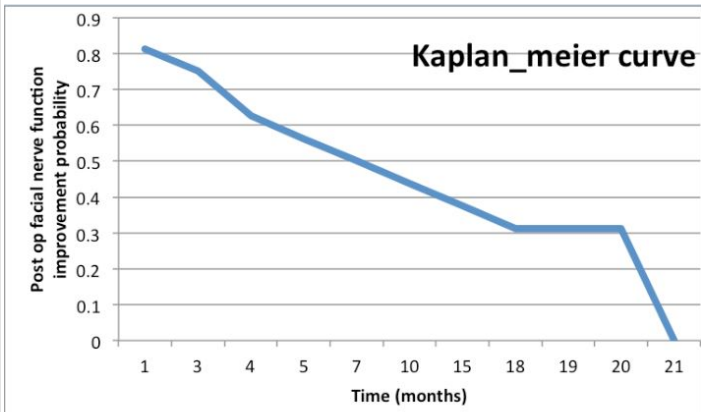
Results

Tumor control was achieved in 21/23 patients with a mean follow up of 25 months. In the postoperative follow up period 91% of patients had excellent (H&B I or II) and good (H&B III) facial nerve function grading. Better facial nerve function was positively correlated with larger residual tumor volume ($rs= 0.66$).

Conclusions

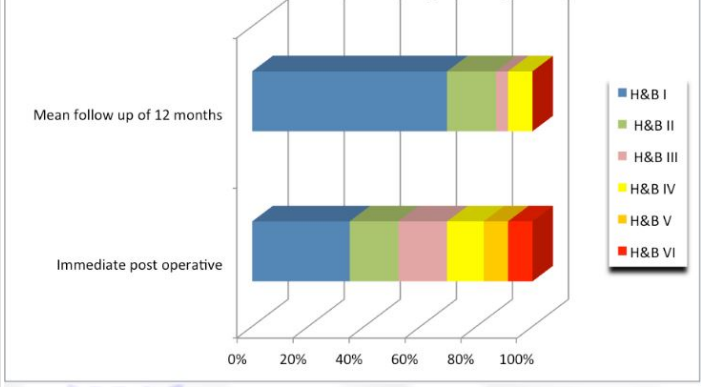
Hybrid strategy of subtotal resection and adjuvant SRS provide patients with large VS an acceptable tumor control and good clinical outcome.

Graph of facial nerve improvement post operatively

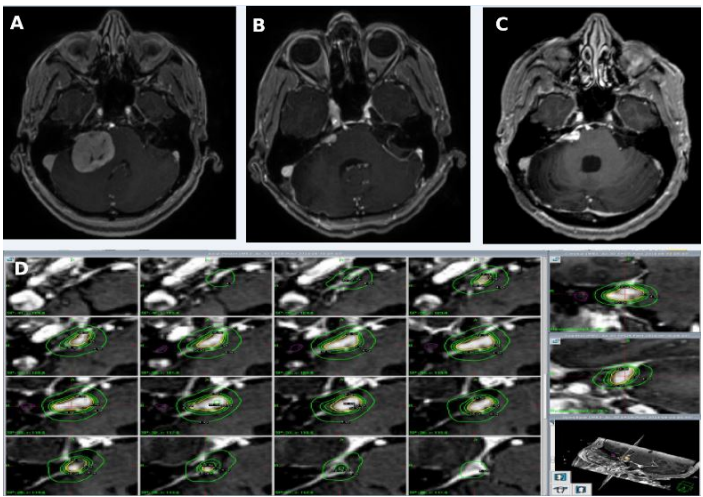


Facial nerve outcomes

House Brackmann grading



Gamma Knife



SRS

